



SHEEP HUSBANDRY.

A friend has kindly sent us Part 2d of the 1st Volume of the Transactions of the Massachusetts Society for promoting Agriculture—new series.

We well remember, when a boy, that we occasionally met with the *Journal of Agriculture*, which was published by the Massachusetts Society and, if we mistake not, it was at that time, or at one time, the only agricultural periodical published in the United States—always excepting Robert B. Thomas' *Almanac*.

Each of these papers contain much valuable information. That of French on Agricultural Education coincides with what little experience and what few observations we have made upon the subject, and we shall probably refer to it hereafter.

At present we have been more particularly interested in Mr. Fay's remarks on Sheep Husbandry, to whom we are indebted for the introduction of the Oxford Downs into New England.

These are a valuable variety or breed of sheep possessing all the good characteristics of the South Down, with a fleece of longer staple.

During a tour of observation in Europe, Mr. Fay examined, attentively, the different breeds of sheep with reference to their hardiness, good qualities and capacity to exist on short pastures.

He selected this breed, and we believe an experience of several years in breeding them has proved that the selection was a judicious one.

The remarks of Mr. F. seem to have been made in answer to certain queries issued by the Massachusetts Ag. Society, and circulated among farmers for the purpose of eliciting information based upon practical experience on this important branch of agriculture.

One of the questions was the following:—"Do sheep, in your opinion, improve pasture land?" The answer to this question, he says, was unanimously in the affirmative, especially in pastures where the coarser grasses, briars and bushes were coming in.

Our own observation and experience has fully confirmed the correctness of the returns in this respect. We have, says Mr. F. constantly under our eye a hundred acre lot, upon which cattle, a few years ago, could not live, that now maintains, in good condition, a large flock of sheep, and the improvement of the pasture has already been so great that a dozen head of cattle, besides the sheep, now do well upon it.

The reasons for this are obvious to any one who has observed the habits of sheep. They are more indiscriminate feeders than cattle; they nip the shoots of almost every shrub as well as weed, extruding many kinds in a few years. They make room, in this way, for the grasses to come in where they have been shaded out or otherwise displaced.

The white weed, the broom or woodwaxen, as it is commonly termed, the golden rod, the blackberry vine, the blueberry, with many similar plants disappear before them, and the finer grasses and white clover take their place.

But sheep are not only valuable as weed and bramble destroyers. As fertilizers they stand among the best of domestic animals. On this point Mr. F. says they exalt their manure in a way to produce the largest benefit, besides which it possesses, in the highest degree, the requisites essential to restoring to the land the phosphates which it loses from land despoiling with cattle.

The manure, too, of sheep suffers no waste, being, in a highly concentrated form, and, at the same time, it is minutely divided and evenly distributed over the surface of the ground. So good and so economical a distributor of manure is the sheep that experienced farmers are feeding them, when in pasture, upon oil cake, for the additional benefit of the manure.

Many farmers in Maine will corroborate the above assertions. We have known many farmers in Kennebec Co., when they have found their pastures deteriorating by the pasturage of cattle and horses, and raspberry bushes coming in a little too thick, shift from cattle to sheep, and by crowding or overstocking a little, they find the brambles disappearing in a year or two, and good herbage taking their place.

We have also in recollection many fields where there were no bushes and brambles, but a very little grass, completely restored to a very good grazing by pasturing them with sheep a few years. This was done by the equable distribution of the very fertilizing manure which they drop.

Farmers in Maine generally, have not yet become so well convinced of the advantages of this mode of fertilizing as to feed their sheep with oil cake in summer in order, while it fattens the sheep, to make their manure still more rich. Indeed, if their sheep get oil cake in the winter they do well. In proof of the value of feeding oil cake to sheep in pasture, add from that which common observation gives, Mr. F. quotes from the *Farmers' Magazine* the following concluding remarks of Mr. Manulon, an Irish agriculturist of experience and note:—

"I am not chemist enough," he says, "to do more than to point out the general benefits of Dr. Appollon's analysis, but I think I have sufficiently opened the question for others more qualified to take it up and show the practical farmer that where he gives artificial food to his sheep, out of every £10 (\$50) expended at least £8, 10s (\$40, 75c) goes to the improvement of the land."

Every farmer of any practical experience, who has kept sheep, has probably found out that the manure of sheep is strong and requires, oftentimes, a good deal of diluting before being applied directly to crops. It is too concentrated to put into the hill of corn, for instance, alone. It is rich in ammonia and phosphate of lime, and before being used should be composted with some material that will divide and separate the particles and its elements, and bring them into a milder form and condition.

The above are a few advantages of sheep husbandry, there are others of equal value. The abundance of wholesome food furnished in the form of mutton or lamb; the warm and comfortable clothing so necessary in our rigorous climate, and the early maturity and quick return of capital are also among the many advantages derived from sheep husbandry.

Some think that all the good of a sheep is the wool produced, and if this does not bring a large price, sheep may as well be annihilated. Such men see but a small part of the service which this humble but invaluable animal is to the human race.

FALL SOWING OF GRASS SEED.

The following correspondence respecting the fall sowing of grass seed, has been furnished us by Philip Morrill, Esq.—for publication.

Mr. PHILIP MORRILL—Dear Sir:—I noticed in the *Maine Farmer* of April 19th, a communication of yours on raising wheat, in which you said, "No grass seed to be sown with the wheat."

I have taken you for a guide, against the advice of my neighbors, and sowed two acres of ground to grain, which was fit to put into grass, but on which I did not put any grass seed. Now as I have followed your directions so far, please lead me clear through.

When shall I sow the grass seed? The land is rocky, low, not clayey or sandy, descends to the south and east, average for moisture, snow does not blow off generally, has been mowed twice, and raised three crops since it was broken up—old mowing. Now sir, I believe your theory to be correct, and I want to sow grass seed and raise such a crop of hay as will convince my neighbors, who run me for not sowing grass seed, and ridicule "book farming," that there is something to be learned besides what our fathers taught us—that there is room for improvement.

The grain, if the weather is favorable, will do to harvest in a few days. Will you please give me an answer, going into details, so that I can readily get each idea, as to the best way of getting the land into grass, giving time and manner of plowing and of sowing, if plaster, lime or ashes should be used, &c., in fact, all you should deem necessary, and you would very much oblige a farmer.

Respectfully yours, OREX O. STEWART.

Union, Knox County, Me., Aug. 16, 1860.

Mr. OREX O. STEWART—Dear Sir:—Your letter of the 16th came to hand this day, and I answer your inquiries with pleasure.

As soon as your grain crop is harvested, I would advise you to plow your land just deep enough to cover the grain stubble completely, say four or five inches, then harrow with a light harrow, sow your grass seed, and brush it in with a brush harrow, going over the ground two or three times.

I would advise you to use one peck of herds grass, or timothy seed, six pounds of red clover, two pounds of white clover, half a bushel of red top, and one peck of fowl-meadow seed top on each acre. On sandy, dry land, I would omit the fowl-meadow seed and add more herds grass and red clover.

Your neighbors may think the quantity of seed extravagant, or even wasteful, but I think it will not prove so. As a general thing farmers do not sow as much seed as they should, by about one half. Land sown to grass last year, in this vicinity, proved to be nearly a failure. The failure has been ascribed to many causes, but no one has assigned the right one—sowing with grain in the spring. There are many arguments in favor of fall sowing of grass seed, but I have to name but a few of them.

Grass seed should be sown in the fall, because it is the natural time; and as much as winter rye or wheat. By turning under the stubble of your grain crops to prepare for sowing grass seed, you give your grass seed the clean possession of land.

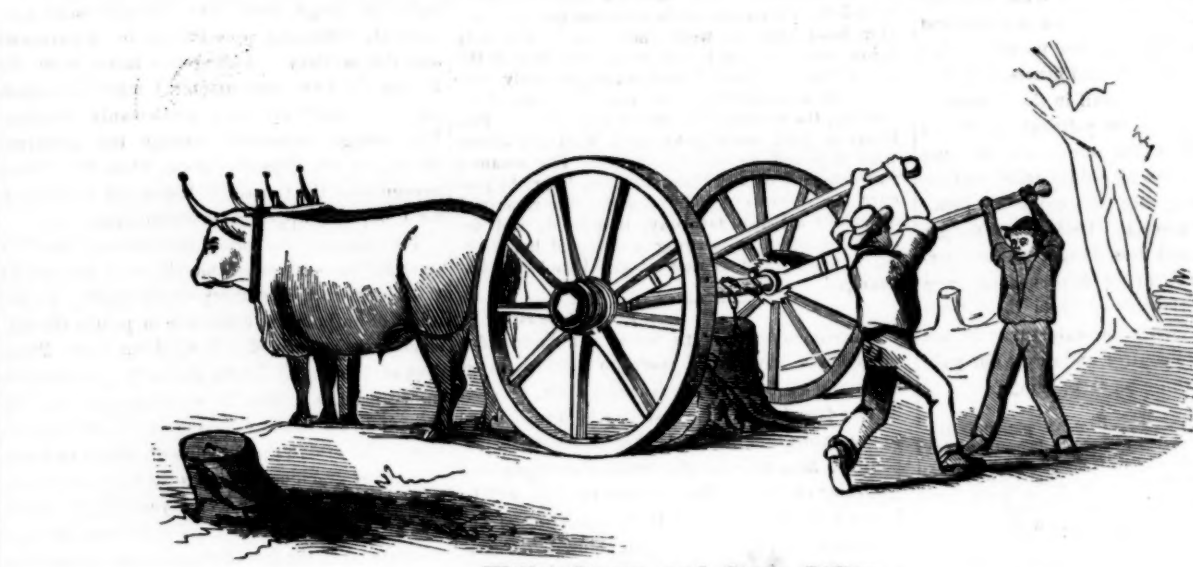
If sown with grain in the spring, the tender grass plants are crowded, above and below ground, by grain and weeds above, and their roots below, and for three months have a hard struggle for life in the shade. Is there any other plant that would sustain life, so crowded and shaded as grass plants when sown with grain? All plants derive the chief part of their bulk and value through their leaves, and when grass seed is sown with grain, at the time of harvesting the grain by mowing, as is now the common practice, the grass leaves are nearly all cut off, leaving the bare stalks suddenly exposed to the scorching, withering rays of the sun, to struggle for life. Can it surprise any one that, after such exposure and trial, his crops of grass, on which his hopes of a good crop are strongly based, should prove short and thin?

As regards the use of plaster and lime, I can give you no advice in this paper for want of room and time. Plaster and lime are not the food of plants. A certain amount of acid is necessary in all soils to dissolve and prepare the food for plants; and if a soil contains an excess of acid, caustic lime will absorb it, and if there is a deficiency, plaster supplies it. It will, therefore, be apparent to you that, until I know your land requires lime or plaster, I cannot direct which to use. There is no subject connected with farming more important to be understood than this—the proper use of lime and plaster, and one so little understood and so often misapplied—both by the learned and the ignorant.

Respectfully yours, PHILIP MORRILL.

Glenburn, Aug. 24th, 1860.

AN EXCELLENT USE FOR DOGS.—An exchange says the most profitable use that nine-tenths of all the dogs in this country could be applied to, is to mix about five dogs with a barrel of lime and ten cartloads of manure in a compost heap. A barrel of wood ashes may be added to help the decomposition of the bones. We believe that a dressing of this compost, applied to sheep pastures, would greatly enhance the production of wool.



Will's Stump and Stone Lifter.

WILL'S STUMP AND STONE LIFTER.

We here give you the portrait of a new machine for lifting stumps and stones out of your way, and when lifted can be carried and deposited wherever you please to have them.

It was invented and patented by Eri Will's, Esq., formerly of Augusta, now of Hammon, New Jersey. The principle of its action will be obvious, on inspection of the drawing. The wheels are made large, say ten feet in diameter, with a strong axle of wrought iron four or five inches in diameter.

The levers at each end are furnished with ratchet and pull to hold the end whenever stopped, so that the levers can again be tipped to take another pull. By successive pulls two men can lift any stump or rock which the wheels will straddle, and when lifted it is all loaded, and Back and Broad will carry it wherever you please to drive them. The machine is simple and comparatively cheap. Mr. Will's is now in this city, and will be pleased to confer with any one desiring further information on this subject.

RUSTY CORN LEAVES AND SCABBY POTATOES—QUERIES.

Mr. EDITOR.—Please to tell some subscribers, who would like to know, the cause of corn leaves rusting and potatoes growing scabby when planted on old fields, several years in succession. Is it from the absence or access of certain elements in the soil?

NOTE. We do not pretend to know, for certainty, the cause of the above named troubles, but we have the Yankee birthright of guessing. 1st. Rust on corn leaves is probably the appearance or effect of fungus or microscopic vegetables which take root and grow on the leaves of the corn. These plants have seeds invisible to the naked eye, and when once they get located in a field they will, of course, increase from year to year like other weeds. Remedy—shift your corn-field.

2d. As to scabby potatoes, we have found that dressing with manures containing a surplus of potash would make potatoes scabby, as strong wood ashes for instance. We are also told by chemists that potato vines contain a large amount of potash. Now, if potatoes are cultivated for a series of years in one locality, and the vines left to decompose on it, will not potash accumulate in that soil and thus corrode the potatoes? Remedy—shift your potato-field and manure with peat or peat partially decomposed. We have thus guessed our guess and invite other guessers to do the same.—Ed.

JERSEYS AND AYRESHIRE.

I notice in the *Boston Cultivator*, of the 11th of August, an article of great interest to our farmers, on the "trial of Ayreshire cows" made in Scotland, in consequence of a prize offered by the Duke of Athol, for the cow which should give the largest quantity of milk in five days. Twelve cows were offered for premium, and the results of the four best are given, as well as the richness of the milk as tested by the lactometer.

If I am right in my figures, the four cows produced an average of one hundred and ninety-two pounds of milk in one day, and the average of the richness of the cream is twelve per cent. This is certainly a large yield, but the richness of the milk is not as great as should be expected. I own four, and but four pure breed Jersey cows, and their milk is carefully and separately weighed at each milking, and tested by lactometers, holding a patent each, once during every month.

I have taken at hap hazard a day's milking, the last that has been entered, from the slate, July 31. I find on that day that they gave but seven-and-seven-pounds of milk, against one hundred and ninety-two pounds given by the Ayreshire cows, but the average richness of the milk was twenty-one per cent, against twelve per cent by the Ayreshires, tested by the lactometer. My Jerseys giving but seventy-seven pounds of milk, made over sixteen pounds of cream, while the Ayreshires, giving one hundred ninety-two pounds of milk, made but twenty-two pounds of cream.

It must be recollected in comparing the quantity of milk, that we are in ignorance as to the mode in which the Ayreshires were fed—we only know that they were all kept up and treated together—nor do we know their condition as to the time of calving; but this we do know, that they were the four best out of probably the twelve best cows in the Ayreshire district, where the trial took place. My Jerseys are not, probably, more than average specimens of their size, and have no grain, shorts or oil cake, feeding upon a rough, coarse pasture, and only now getting in addition to their pasture, the thinnings from my roots, night and morning, in very small quantity. One of them is but two years old last winter, and dropped her first calf in April, and another calves early in October. All these considerations must be taken into account, and making any comparison, and if they are fairly weighed, it will, I think, satisfy almost any one that the old idea that Jerseys are poor milkers does not apply to them at the present time; the superior richness of their milk over all other breeds has never been disputed.

Now, Mr. Editor, I am not a rich, or a great man, like the Duke of Athol, but I will place in your hands fifty dollars, equal in value to the prize offered by the Duke, to be given to the owner of a pure bred Jersey cow which shall give the greatest quantity of milk in five consecutive days in the same month and days of the month on which the Ayreshire trial was made, the richness of the milk to be tested by the same sized and proportioned lactometer, provided you will undertake the task of seeing that the trial is accurately and fairly made, and provided twelve contestants can be found, willing to take a little pains for the purposes of ascertaining the maximum product of milk that a good Jersey cow will produce. I do not think it necessary the cows should be kept together, though it would be better that they should be treated alike. If kept separately, an accurate account should be given of the method of feeding, &c.

REMARKS.—The time when the trial of Ayreshire cows spoken of took place, was last April, so that if any trial is desired here, there will be ample time before that month comes round again to make any necessary arrangements. The liberal proposition of our respected correspondent is in keeping with his constant and well-directed zeal in the cause. It will give us pleasure to second his efforts by any means in our power.—[Ed. NEW ENGLAND FARMER.]

THE APPLE TREE BORER.

Mr. Jefferson Higgins, of Bangor, communicates the following to the *Way and Courier*, and we copy it for the benefit of our readers: Having suffered somewhat from the depredations of the borer, in my apple trees, and by observation, and by the frequent remarks made by persons from different parts of the State, I am led to believe this evil to be general. Few orchardists have escaped the loss of a greater or lesser number of valuable trees. Having found a preventive, if not a cure, I thought I might be doing the public a service by giving my experience through your valuable paper. First, although it may be superfluous to describe the borer, I will say that it is a worm about 14 to 14 inches long, and about 3-16 in diameter, or about the size of, (and resembles very much) the army worm, when from 6 to 10 days old. Their mode of operation is to commence near the surface of the ground, and boring a hole the size of their body, they enter the tree, and turning upward, work their way just inside the wood. Their attacks upon a tree may be discovered by finding the core upon the ground close to the trunk.

My method of treatment is to enter the point of a stout pruning knife into the hole, letting the knife follow the track of the worm as far as possible, and generally this will overtake the gentleman and destroy him; but to make it sure, I introduce a wire and probe the hole thoroughly. Now the tree is ready for the remedy, which is, to take two parts of common raw tar and one part of turpentine, stir together so as to be laid on with a paint brush; then remove the bark, with your hand, or stick, close around the trunk, and, if the tree be old, scrape off the rough bark; then apply the tar, putting on a good coat for a foot from the ground downward, letting it run into the ground about the roots, so that the borer will not get under it. When this has been applied before an attack, which is usually in July, I have never known an instance of a tree being attacked by them for the season. And when this application has been made after the tree has been badly cut by them, as above described, I have never seen the track or mark of one of the borer in the remainder of the season. Having treated my trees as above, for the last three years, I am confident it is worthy of a trial by all who have apple trees which they wish to preserve from the ravages of this miserable borer.

DRIVING MILCH COWS.

Dairymen are every year astonished at the remarkable yield claimed for some dairies, reaching five or six hundred pounds of cheese and butter per cow, and even higher than this, the cows being fed on hay and grass alone. To prove the truth of these statements, we are referred to the books of the merchant who has received the produce, and it is found all correct. Good cows, good feed, a careful dairymen, are the most obvious reasons that must unite in producing this result. These are at the command of any one who earnestly sets about it. Yet how rare and how difficult it is to attain these highest yields of the dairy! The truth is, many minor causes, apparently too trifling for notice, must operate together, or we fail. Inquiring out one of three large reports, we found that the owners, the man and his wife, not only did all their milking themselves, but they also brought and drove their own cows. Quietness in driving, especially when the udders are full, is of the utmost importance. A broken bar, and a swelled teat are often the only indications the owner gets of inconsiderate haste in driving his cows. A wide gate, or taking out the bars entirely, is safer than to let them down at one end.

A dairymen complains of the season as bad for the dairy, but his neighbors say, the training of shepherd's dogs is worse than the season. Two boys and a dog are as useful for driving cows as they would be to drive a mowing machine or a locomotive. We have seen one boy and a dog urge them to the bars, and another watch outside to give them a good scare and make them jump as they came through. Yet the good dairymen did not know why her cheese was smaller the next day.—*Homeside*.

THE THIRTEEN FARMER.

The thrifless farmer provides no shelter for his cattle during the inclemency of the winter, but permits them to stand shivering by the side of the fence, or to lie in the snow, as best suits them. He throws their fodder on the ground, or in the mud, and not unfrequently in the highway, by which a large portion of it, and all the manure, is wasted.

He grazes his meadows in fall and spring, by which they are gradually exhausted and finally ruined. His fences, old and poor, just such as to let his neighbor's cattle break into his field, and teach his own to be unruly and spoil his crops.

He neglects to keep the manure from around the silos of his barn—if he has one—by which they are prematurely rotted, and his barn destroyed.

He kills or skins over the surface of his land until it is exhausted, but never thinks it worth while to manure or clover it. For the first he has no time, and for the last he "is not able."

He has a place for nothing, and nothing in its place. He consequently wants a hoe or rake, or a hammer, or an augur, but knows not where to find them, and thus loses much time.

He loiters away stormy days and evenings, when he should be repairing his utensils, or improving his mind by reading useful books or newspapers.

He spends much time in town, at the corner of the street, or in the "rum holes," complaining of hard times, and goes home in the evening "pretty well torn."

He has no shed for his fire-wood; consequently his wife is out of humor, and his meals out of season.

He plants a few fruit-trees, and his cattle forthwith destroy them. He has no luck in raising fruit.

One half of the little he raises is destroyed by his own or neighbor's cattle. His plow, harrow, and other implements lie all winter in the field where last used; and just as he is getting in a hurry, the next season, his plow breaks because it was not housed and properly cared for.

Somebody's hogs break in and destroy his garden, because he has not stopped a hole in the fence that he had been intending to stop for a week.

He is often in a great hurry, but will stop and talk as long as he can find any one to talk with. He has, of course, but little money, and when he must raise some to pay his taxes, etc., he raises it at a great sacrifice, in some way or other, by playing an enormous share, or by selling his scanty crop when prices are low.

He is a year behind, instead of being a year ahead of his business—and always will be. When he pays a debt, it is at the end of an execution; consequently his credit is at a low ebb.

He buys entirely on credit, and merchants and all others with whom he deals charge him twice or thrice the profit they charge prompt paymasters, and are unwilling to sell him goods at any cost. He has to beg and promise, and promise and beg, to get them on any terms. The merchants dread to see his wife come into their stores, and the poor woman feels depressed, and degraded.

The smoke begins to come out of his chimney late of a winter's morning, while his cattle are suffering for their morning's feed. Manure lies in heaps in his stable, his horses are rough and uncouried, and his harness trod under their feet.

His bars and gates are broken, his buildings unpainted, and the boards and shingles falling off—he has no time to replace them—the glass is out of the windows, and the holes stopped with rags and old hats.

He is a great borrower of thrifty neighbors' implements, but never returns the borrowed article, and when it is sent for, it can't be found.

He is in person a great sloven, and never attends public worship; or if he does occasionally do so, he comes sneaking in when service is half over.

He neglects his accounts, and when his neighbor calls to settle with him he has something else to attend to.

Take him all in all, he is a poor farmer, a poor husband, a poor father, a poor neighbor, and a poor Christian.

GOOD USE FOR STRONG DRINK.

Mr. Quimby the celebrated New York Apianar, a year or two ago recommended, in the *New York Agriculturist*, treating the bee moth to a little sweetened whiskey during the months of August and September, and thus luring them, as whiskey is wont to do, to destruction. Speaking of the moth he says, these poor, weak creatures, like some others who bear the image of a more noble being, have a fatal weakness—an appetite, for a few moments gratification to which everything is sacrificed, even life. They are fond of strong drink. Instead of whiskey you may mix together sugar or molasses and a little vinegar and water. Put this in shallow dishes, saucers or tin baking dishes, and set them among the bees at evening. The moths will be attracted by the taste of the liquor and be found drunk and drowned. He advises to drain the liquor away, give the moths to the chickens and set the liquor back again to catch more moths.

THE WAY TO USE FAIRS.

Hundreds and thousands of good people will attend County and State Fairs in the next two months. To very many of them the question, how they can secure the greatest good from them, will present itself as one of the most importance. And they may desire (without being able to get it) the advice of some friend whose experience will save them the loss of time and money. For the benefit of such, and of all others who may receive advantage therefrom, we make the following suggestions:

1. If possible, go at the beginning and stay to the end, especially do this if you have a great distance to travel. Suppose a State Fair lasts three days, and you have to go one hundred and fifty miles to be there. In time and money, it will cost you, say eighteen dollars; that is to say, you will receive more than three times as much advantage for eighteen dollars as you will for fifteen.

2. For the same reason, make all arrangements to have all the time at your command to attend the Fair while you are there. If possible, get a good, quiet boarding place beforehand. This will save time, avoid annoyance and increase your enjoyment. Do not spend your time in seeing monstrous women of any kind, nor in visiting the theater, nor in visiting the thousand things that will invite your notice outside. When you have more than you can do to attend the Fair, you cannot afford to waste your time in such a way, whatever you might be weak enough to do at other times.

3. If you are engaged in any special department of business, attend at first to all that concerns that. In the multitude of objects, you must make your selection: you cannot attend to every thing. Of course, your own business should claim your first attention. If you are raising sheep, you will study especially all the breeds of sheep present, make the acquaintance of other men engaged in the same business, make comparisons, exchanges, and attend to all that pertains to your own group of operations. So of other things. Become as thoroughly posted on all matters you wish particularly to examine, by reading and inquiring before you leave home, as possible; such knowledge will be of great use to you in making observations.

4. Conduct your observations according to some previously conceived plan, and make a note of everything which may be useful to you, in your note book, for future use: you can accomplish five times as much with a note book as without one. Try it.

5. When you have examined all that relates to your own business, then, and not till then, examine other matters as far as you can, pursuing the same systematic course. Go slowly through the several departments, carefully noting and laying for future thought, all the materials you can. Do this well, and you will be surprised to find how much you can treasure up in a day.

6. In matters in which you are a novice, venture no opinion, but ask all the questions you properly can, and pay great attention to the judgment of experienced men. If you can fall in with a group of such men, as they are examining, for example, the show of cattle, listen to their remarks and discussions. You will learn more thus, in an hour, perhaps, than you ever knew before. It is a very great matter to know what they say and think, and why they say and think so.

7. Make the acquaintance, as far as you can, of the leading men in each department of improvement. To know personally the leading stock men, nurserymen, gardeners, editors, authors, and all others whose skill or intelligence has given them a position and influence, will be a great gratification now and may be of great use in the future.

8. Finally, resolve to go to your State and County Fairs, and learn all you can. Make yourself familiar with all the above suggestions, and act on them, and our word for it, when you return, you will thank us, and feel that your time and money have been well spent.—*Ohio Farmer*.

THE WILD AND THE DOMESTICATED HORSE.

Notwithstanding the horse has been the servant and companion of man for hundreds of years, and his nature, disposition and habits, have been studied more than those of most other of our useful domestic animals, yet there is a deplorable degree of ignorance of the extent of his intelligence when in the natural or wild state. That the various breeds or races differ very much in intelligence, disposition and temper, no one at all informed will for a moment doubt. Neither will it be denied that these faculties may be cultivated and greatly improved and increased, by careful and judicious management and education.

The horse, like the child, may be made gentle and affectionate, or vicious and ugly by education. Few children or horses are, in our opinion, vicious or unmanageable from their teachers or superiors. By all his movements and actions, the horse admits, or seems to admit, the superiority of man, and if kindly treated, looks to him as his best friend; and every enlightened and humane man will treat his horse as his most faithful servant, and the best of all his mute friends.

In the wild state, says a well informed writer, the horse has no intermediate pace between a walk and gallop. Hence it will be seen that the thirty-two trotters have been made such by breeding for generations, and education. Much may be known of the intelligence and disposition of the horse by the shape and size of his ears, and their position upon the head. Horses with rather small, slim ears, not too far apart, erect and lively in motion, indicate breeding, intelligence, and spirit. More may be known from the ear than the eye. If the horse is in the frequent habit, when on a journey, of carrying one ear forward and the other backward he will be found to possess both spirit and endurance. This shows that he is attentive to everything that is passing around him, and cannot be much fatigued, or likely soon to become so. It has been remarked that few horses sleep without pointing one ear forward and the other back, in order that they may receive notice of the approach of objects in any direction. Dr. Arnott says that, "when horses or mules march in company at night, those in front direct their ears forward; those in the rear direct them backward; and those in the center direct them laterally, or across; the whole troop being actuated by one feeling, which watches the general safety." Another writer says that, "an experienced observer of horses can tell, by the motion of their ears, all that they think and mean." The hearing of the horse is remarkably acute; a thousand vibrations of the air, too slight to make any impression on the human ear, are readily perceived by him. It is well known to sportsmen, that the cry of hounds will be recognized by the horse, and his ears will be erect, and he will be all spirit and impatience, a considerable time before the rider is conscious of the least sound.

When kindly treated, the horse often becomes firmly attached to the habits and manners to which he has long been accustomed. He manifests a strong disposition, and often great pleasure, in doing the bidding of his master. He not only yields to the hand, but seems to consult the inclination of his rider. In a measure, he renounces his very existence to the pleasures of man. In the wild state, they possess force and dignity, which are the gifts of nature; they are by no means ferocious in temper, but are only fiery and wild. Though of strength superior to most animals, they never make an attack; but when assaulted, they either disdain the enemy, bound out of his way, or perhaps strike him dead with their heels. They associate in troops, acquiring a natural attachment for each other, from no other motives than the pleasure of being together. They appear to be under the command of a leader, which they implicitly obey. When attacked by a tiger, at some signal intelligible to them all, they either close into a dense mass and trample their enemy to death, or place the mares and foals in the center, forming themselves into a circle, and welcome him without their heels. In the attack their leader is the first to brave the danger, and when prodded demands a retreat, they following his rapid flight.—*Am. Stock Jour.*

PRODUCE OF MILK, CHEESE AND BUTTER PER COW.

The following statement from Mr. J. T. Harrison of Gloucestershire, England: The following are the results of my experience in dairy farming the last few years. In 1857, having plenty of water, we made all the cheese with the machine, and it proved the most profitable year. I milked 55 cows, the quantity of milk made into cheese was 31,728 gallons, or 577 gallons per cow, besides the milk expended in weighing 43 calves:—

	W.	Q.	P.
The actual returns for cheese was,	615	0	0
do do butter was,	182	6	10
do do milk sold and used was,	6	0	0
do do whey 220 h'ds, at say 1s. 6d. 00	0	0	0
do do rearing 43 calves was,	43	0	0
Total,	2312	6	10

The following are the returns of other years including the same particulars:—

rough and uncurried, and his harness trod under their feet.

His bars and gates are broken, his buildings unpainted, and the boards and shingles falling off—he has no time to replace them—the glass is out of the windows, and the holes stopped with

In 1858 and 1859 we could use the machine only about two months for want of water. The diminished yield in these two years I attribute to a great measure to the excessive dryness of the season; other circumstances affecting the cows likewise contributed to the result. In 1858 the price of cheese was not so good, and the quality was inferior, especially that made during the autumn.

SEEDING WITH TIMOTHY AND CLOVER.

Mr. Levi Bartlett, of New Hampshire, in reply to the question of a correspondent of the *Country Gentleman*, "How would it do to seed down with timothy in the fall, and clover in the spring—rolling or harrowing in the clover," writes as follows:—"The last of August, 1858, I turned over a piece of greenwashed, alluvial soil. Before plowing I applied a fair dressing of manure. After the land was plowed, passed a heavy roller over it to press down the furrow slices—then applied

THE ORGAN

The Story Teller.

"Still that light from his window, mother

"I'm going to smoke a cigar, and walk up and down five miles; meantime, the air will do me good. I shall be off very early in the morning."

"Let me go with you?"

"Not this time; I must be alone; good-night. I have the key of the door."

And so they parted; but before a quarter of an hour, James was at her door, telling her not to be melancholy, for he had six weeks before him yet for his picture, and asking for Helen's message. Having heard it, he left his love for her, told Mary to sleep sound, and not get up early, and went up to his room.

Though a little comforted, poor Mary lay awake for hours revolving sad thoughts of ruined hopes that had been built on that picture, which, notwithstanding James' words, she believed would never be finished now, and it was late before she awoke. Her first thought was of him, and she hurried on her dressing gown, and ran up to his room; but his door was open, and he was gone. He seemed not to have entered his studio again, for when she went in to keep her promises about the stove, the camelia lay behind his chair as it dropped from her hand. She took it up, and put it in water, averting her head from the easel, though she might not see the picture, and determining to call on Helen early in the day, and sighing to think what she would suffer when she heard the state in which it was now.

There had been a long engagement between James and Helen, dating back to the time when Helen was the daughter of a rich merchant, and James was the favorite nephew of a rich uncle, and destined for the bar.

When he, following his unconquerable love of art, relinquished his profession, his uncle, and lost his inheritance, it was Helen alone who stood by him, had faith in his genius, and reliance on his steadiness of purpose. Then came three years' separation while he studied in Italy; and he came home to find her bankrupt and, and her beautiful voice and musical talents the support of the family, but constant to her love for him, and dearer to his heart than ever.

"You will marry her when you have sold your first picture in the royal academy," her father had said; and all the more, because her father was unfortunate, had Helen obeyed him implicitly and waited, waited long and faithfully. The first year of his return, James would not finish any thing that satisfied himself; he would not exhibit at all. But now she had confident hopes that the time was at hand. That picture must succeed; there could be no doubt about it; so she employed every leisure hour in training her younger sisters to take her place in the family. Lucy already taught her pupils occasionally, and Lucy's voice was better than her own; so she looked forward with hope to her marriage day. Half in joke, half in earnest, it was already fixed between her and James. They had decided it was to be on the 10th of May, just long enough after the opening of the exhibition to allow them to prepare. Well might Mary's voice tremble, then, as she told Helen the events of the night before. But Helen's faith in James was unconquerable.

"Trust to him," she said; "he knows what he is about. Did he not say so? He will come back and go to work again, and you will see that he is right."

And he did come back on the third evening full of life and heart, with a face brightened up by the keen winds of a frosty February, in which he had walked twenty miles a day; got up at dawn next morning, and worked early and late for weeks. No one saw his work, and no one talked about it; but the two loving hearts that felt with him saw all was going on well, and had no anxiety. Mary a pleasant hour they passed in the little sitting-room, when the labors of the day were over, and many a time it resounded with jokes and laughter, for James and Helen were both full of life, and Mary had a ready sympathy always for joy or sorrow. At last they all stood together before the finished picture. It was a noble work, infinitely finer than it could have been without the alteration and hard work of the last six weeks. Tears stood in Mary's eyes, and the light of joy and pride flashed from Helen's, as they congratulated the artist and themselves.

Something had to be done, however. An artist never thinks his work complete: there is always some last touch to be given, and they were ordered down again. On the stairs they were startled by a loud double knock, and saw a handsome carriage at the door as it opened. Mr. Thompson was asked for, and a gentleman, whom they knew in a moment as the original of the portrait of Sir Jasper Langley, was shown up to the studio.

He had come to see the picture, which he remembered as a sketch when his portrait was done. He looked at it long without speaking, through his glass, though his curved-up hand, with his head to one side, with his face close up to it, then far off. He hid every bit of it by turns with his fingers, and shaded first one corner, then the other, with his handkerchief. The artist stood by, fuming inwardly, his stock of patience failing fast.

"How much do you ask for this picture, Mr. Thompson?" was the first question. No word of praise or admiration had preceded it.

"A hundred guineas, Sir Jasper."

"Very much too high a price for your first exhibition."

"Very much too low for a year's work, Sir Jasper, I am sorry to say."

"I repeat that it is too high a price," said the baronet, again looking through his glass.

"And I repeat that I will not abate a single farthing," said the artist almost fiercely.

There was no arguing with such a tone as that.

"Well, I suppose that I must have the picture," said Sir Jasper. "Mark it 'sold' when you send it in."

"I will do so, Sir Jasper."

The baronet put his hand in his pocket, and was going to ask for pen and ink to write a check, but paused on looking round at the bare walls, the carpetless floor, the utter want of all furniture, except the gems of art that shed a glory on it. He saw that he had to do with a needy man. He might get the picture cheaper by waiting till the academy opened. There was the chance of rejection. He looked again. No, that was impossible. But there was the chance of a bad place—a bad light—the neglect of the public towards an unknown name; and it was very unlikely that any one else would find it out, at all the events, at the private view, or the first day. He resolved, in his desire that it should be marked "sold," but promised to complete the purchase on the first Monday in May, and took the leave—James then saw him down stairs, and returned to his bow from the window of his handsome carriage as it drove away.

Why did Sir Jasper try to beat down the price of that picture? He was not a very good judge; still he believed that it was well worth twice as much as he was asked to pay, and it was quite easy to him to pay one sum as the other. It was simply because he loved making bargains, and was used to it; because he was what is called a patron of rising talent. But why, then, having so mean a soul, did he covet that picture? Because he valued all pictures, not for their intrinsic beauty, but for the chance of their becoming famous.

his news; said that needle work and manuscripts must vanish into darkness; notes of exercise must be written to pupils' notes of explanation to Lucy and mamma, and instant preparations made to spend the rest of the day somewhere among green fields and woods. It was lovely weather towards the end of March. No time to be lost, and they were off in high spirits in half an hour.

It was a bright and joyous day. They came away by moonlight, loaded with primrose, sweet-scented herbs, ivy wreaths, having wandered over wild commons and through green lanes; and as a country inn, and decided that the wedding trip should be into that same country, when they had supper in the little sitting-room, lighted and scented with their flowers and wreaths; and sang, laughed, and talked till the morning; and at last only separated because Mary had begun a science lecture on the fact that that old lady in the velvet dress was to take her first sitting at ten o'clock.

The old lady's portrait, and other work of that kind—which must be done for the money's sake, occupied the time that James logged to give to the pictures that crowded upon his imagination at the first flash of his enthusiasm. That check, which it had come out of the pocket, would have produced a rich interest—interest of more value to the world, if only the world knew it, than ten per cent; but it takes no note of its losses that way.

He sent his picture to the royal academy for exhibition. Then came the anxiety as to whether he should be received; but this ended in about ten days. His picture was hung. How and where? What was the next thought. And so, amidst rudeness and anxiety, came on the day of the private view, to which artists do not go, and then he saw that the exhibition opened to the public. Helen had kept entirely aloof from all his brother's art; he would not ask any acquaintance among them till he had tried his strength, or he would have heard something of his fate; as it happened, he was as ignorant of it as any casual visitor to the exhibition on the first Monday in May.

Before twelve o'clock, Mary and Helen stood in the closed door of the royal academy among the crowd assembled there, something like the crowd at the pit doors of a theater. The hour struck on St. Martin's Church, the door opened, the crowd pressed in, the shilling received in each hand was said, the ticket received, and they hurried up the stairs. The rooms looked empty, though outside had seemed that there were people enough to fill half them; they could see the walls of every room. The picture they looked for was not in the room, nor in the middle room. They were both growing giddy by the time they reached the great room, and Mary's heart sank, and began to tell her that what they sought must be looked for in the octagon-room—or then the condemned cell of exhibitors—among the architectural drawings.

No such dreary ideas ever entered Helen's more cheerful mind. She saw every thing even more quickly and clearly than usual, her senses being rendered more intense by her excitement. Suddenly she pressed Mary's hand, and hurried her across to the opposite wall. There it was, in the great room, below the line, but in a good light. It was beyond, far beyond Mary's hope, but not so to Helen's; still, she also flushed up with gladness, for even she could not but see that such a place was a high honor to a young unknown artist.

The first thought, as they steadied themselves before it, and were able to think at all, was, how beautiful it looks! the next, how beautiful it looks! They stood there long, and when they turned round, they found that the room was filling very fast, and that it had already become difficult to get near any of the favorite pictures, even if they had cared to do it; so they made their way back to the top of the stairs to watch for James.

A continuous stream of people passed up, of whom many were young artists. All the members of the academy knew all about it long ago—had seen at the dinner, or the private view; but the young men and the great majority of the lady exhibitors came now for the first time.

There was James at last. He came up slowly, pushed his hair nervously off his forehead, as if his head ached, and showed that very pale countenance that over fatigue and anxiety always gave him. Eagerly they met him, and he had to remind them once or twice to speak low, as they told their news and hurried him in. One look was enough; and then he helped his two companions through the crowd to the upper end among the masterpieces, pointing out the good, and passing unnoticed those for which he had no sympathy. His spirits rose as he looked. His own work was imperfect; no one knew its imperfection as well as he did; but it bore within it the promise that some day, and that at a very distant date, he should be placed among these.

They walked away homewards together. "Are you ready, both of you, to set off for the sea to-morrow?"

"But Sir Jasper?" said Mary.

"Don't wait for him," cried Helen. "James is quite ill. Look at his forehead; he must have rest and change. Sir Jasper's letter can be sent after us."

"You remember your promise, Helen; one week at the seaside we are married."

She pressed the arm on which her hand rested, and they had forgotten all the world as their eyes met.

"Thompson, is it possible? Where have you been these hundred years!" It was an old school-fellow and college companion who held out both hands and stopped them with these words, as they walked along the Strand.

"Harris, my dear fellow, how glad I am to see you again. I should have passed you if you had not stopped me." They shook hands warmly.

"Miss Thompson—I must not say 'Mary' now, fear—have you forgotten me?"

There was a faint blush on Mary's cheek, which he tried to laugh off, as she held out her hand. It told of memories that suddenly flashed upon the face of the old, old story—a youthful passion in former days between her and her brother's friend.

"Seven years since we parted, I do believe," said Harris. "I suppose you have passed at the same long ago, Thompson!"

"You must come and see me, and then I will tell you all about it. And what have you been doing all this time?"

"I? Oh, sometimes in London, sometimes in Paris, making money slowly, and spending it quickly."

"Ah! I have seen your name in literature, and enjoyed some of your speculations."

"I generally write anonymously though. No, don't give me your card, and rush on again. Come and dine with me. My rooms are close by; and I've a pleasant set of fellows coming, mostly of the law profession as myself."

"Not to-day, I am engaged."

"Very pleasantly, I imagine."

The introduction was made; and by promises that the party should break up quite early, and declarations that as he himself must not go to Paris next morning, they could not set out again for months, Harris persuaded Helen and Mary to take

"...that provoked James. He regarded a good deal of excellent criticism with indifference; of the company who sat at the bottom of the table, and who seemed the only one able to appreciate art at all. As to the others, they were the worst of critics. Any except finding food and drink was his business; and, after daily contradicting and laughing at others, he had made up his mind not to say another word on the subject, for he should lose his temper, when Harris took up the *Midas* out of his pocket, and began reading the article on the private view of the Royal Academy, for the amusement of the company."

"Of course it began with eulogiums on the works of honored academicians and associates; but as younger men and unknown names were brought under review, James' ire rose again. A most ignorant piece of criticism!" he exclaimed. "Wrong on every point. It praised what is really bad, and pulls to pieces everything that is good." "Incomparably obliged!" said Harris with a bow. "Obliged! Who, what is it to you?" "What! Only that it's my own writing. You did not tell me I am an art-critic!"

"No, indeed; such an idea never could have crossed my head."

"This is capital fun," laughed he who sat at Harris' right hand. "Go on, Harris. I suppose we're more."

"Oh, yes, some of my best hits are to come. No. 777, *By the Sea*, by J. Thompson.' Hopeless on no relation of yours, Thompson."

"It he is, I shall not recognize him in your dedication, I fancy."

"Well, here he is in style. 'We really have been so much time, in fact more than time, to have exalted effort than it deserves, or than it has already overtaxed patience rendered easy, but that there were unable to arrive at the very meaning which this young aspirant evidently thinks is expressed by the hollow eyes and exaggerated gestures which he has here portrayed. As the young lady in the center, we think that the beautiful breeze from the sea, near which she stands, might have been expected to give her a cadaverous hue; and what, in the name of common sense, are the figures on her right named? For heaven's sake, let us away with the pretentious flights, at least till the floggings get to their pen-leathers.'"

"Not a muscle of James' face moved.

"Capital!" says Harris' right hand man, looking at Mr. Thompson! 'Let's drink his health, and bid adieu to our journey to Rome.'"

"The toast went round."

"The insults heaped on James' work were the more stinging to him because they came from his friend, to whom his heart had just opened warmly; and, moreover, he was at this moment at less able than usual to bear any kind of provocation. Every faculty of his being was beforehand engaged in preserving an outward calm; he succeeded so perfectly that no one had the slightest suspicion that he was feeling anything at all."

"The party broke up soon afterwards. 'You may walk home with you, Thompson,' you know in a moment," cried Harris.

"James did not answer. He was already on the stairs; but Harris, busy in dismissing his companion, observed nothing, and they were soon in street. Harris could scarcely keep up with the pace at which his companion strode along, and, to conversation, it was impossible, so after a few steps, or two, he gave it up."

"They found Helen and Mary in the little sitting-room, which was decorated with flowers, and had a carpet of gala air. A letter in Sir Jasper's hand lay on the table. Helen's eyes beamed as she showed it to James, and it seemed to her that she saw their marriage bells ringing, for there was written on it 'first exhibition picture.'" But Harris with a look of scorn, his face fixed sternly, and his lips firmly closed. He opened the envelope, looked at it and crushed it in his hand. Omnipotent silence and a strange, confused dread over them.

"Harris tried to rally, and turned aside to look at two small cabinet pictures.

"Come up to my room, will you?" said James. There was something so imperious in his tone that Harris mechanically obeyed. Helen followed, thinking to Mary to accompany her, while she herself remained in a selection of some work of Mr. Thompson's."

"As they reached the open door of the studio, James saw Harris, who had just entered it, turn pale, and visibly tremble. His first impression told him that his old friend was an artist, but that he had no idea; his first thought reminded him of his criticism. He tried to excuse himself, to declare what he had written was in ignorance; but his voice died away in indistinct mutterings.

"No more words," said James in a suppressed tone, but speaking distinctly. "Here is a letter of mine to you—read aloud."

Harris took the letter and read it, but not without Helen watching it up and read:

"Sir Jasper Langley feels confident that after his opinion of the press, as expressed in the article in the *Midas*, Mr. Thompson will not expect to complete the arrangement for his picture. Jasper Langley much regrets this contra-tempt, and hopes on some future occasion to be more fortunate in a selection of some work of Mr. Thompson's."

"When James tried, as she finished, to catch James' eye, to speak to him, to make him hear her, he was in vain. He passed her, and went close up to Harris, as if to strike him, but by a violent blow mastered the impulse.

"Vain, ignorant, presumptuous fool!" he said in a voice almost choked by the burning passion which held down. "That picture you have ruined the result of the study and thought of four years. Have you my house! Take yourself out of my sight. I shall forfeit my own dignity, and lose all claim of myself!"

Harris bowed his head and held out his hands in deprecating manner, but did not move; and James seeing him still there, rushed down stairs and out of the house, as if he had no other means of controlling his own violence.

"I have learned my lesson," said Harris, looking at Helen, who stood upright before him. "I will never—never while I live shall I forget it. If I had stabbed me, I deserved it."

"To no one answered. Mary had nearly fainted. Helen stood immovable and silent.

"Can you forgive me?" said Harris. "Miss Thompson! Mary! you know I did not mean to offend."

Helen only moved her hand in the direction of her face as it to ask him to leave them; Mary only her hand in her hands.

"Only hear me before I go. Tell him I meant to explain to him; that I had no idea he was an artist. The remotest idea he had painted that picture, not obliged to give some lightness to article, and by evil fortune I fixed on this design."

Helen started and turned away in disgust.

"Hear me yet! I see my wretched error—my

lighted a solitary candle, and it shone on the flowers they had arranged so James. They went into the bedroom, where were the traveling-bags packed ready for morning. Where were their hopes now? Arriving bells had become a death-knell to quite still, holding each other by the hand listening anxiously for James' return. There was a knock at the door. They both started and ran down stairs, longing to give sympathy and comfort.

"It is at a blank, dreary feeling it was when I opened to see, not James, but a boy with whom Helen knew. Helen seized it, and ran to the stairs to read it, while Mary tried in vain to shake him off. He found her purse, and the boy, who asked for a shilling for his letter. At last she had done, the door was closed, and she was able to hear the few words in pencil:

"Give me for leaving you; but I cannot satisfy myself within reach of that insolent upstart could bear even you near me. The starting, and I am going off towards the west in my write from where I stop. I must leave myself to loneliness."

went up slowly together. Mary sank into Helen's arms in the middle of the room amidst feelings of anguish. She tried to speak, but no sounds came from her aching heart, and as she roused from her own sorrow to go and tell or closely, try to comfort her, try to tell would return, that they should be happy at patience was all they wanted.

"My friend," said Mary, "the voice came at last, choked with tears, 'you say words only, idle words. It is nature to bear shocks like these; before we are brought in that grand work, that used very life to finish, and that has been so much.'" Her voice failed, and her indignation seemed to shake her whole frame.

"I am in life," she went on presently, "it is a moment we know where he is, and you, too, Mary; we will both go. No wonder we are able to do this better than I; you have made him your comforter, his help throughout trials, while I— This shall not go on. I will make my father see it. Yes, my dear sister, I will see it. I must have a wife's rights to soothe and help—to share his joys, and his sorrows, and toils, and lighten them as well as his life can." What matters selfish pictures! I will work. Thank Heaven, I can work too. We will work. This shall not go on!"

only answered with a fervent embrace. Helen was able to James all she longed for; but three days passed without a word from him. These would have been insupportable but for the fact that had to be done in time. Mary had written everything for an indefinite absence home; Helen to prepare Lucy, her mother, to part with her from home forever. When the first two her task was easy, except for that which would cling round that trying separation, but with her father it was a hard struggle. He did, however, give a reluctant consent at last. She spent her nights with Mary always. It might be heavy trial had to be borne; but miserable fears, dreadful images before her, and she could not sleep. Often she said that Mary, too, was awake and crying bitterly.

"Mary is too gentle, too sensitive for her life," would Helen say to herself; "she is sister's love and sympathy. Oh, only let her live, then all shall be right!"

postman's knock was always startling, and to always disappointing. The letters came every day on the fourth morning; none from him. Mary was authorized to open all that came from him, and when the bitter disappointment had recovered as to let her think of anything else. Her exclamation over the letter brought Helen to her side. Sir Jasper had written to commission another picture. Mr. Thompson to fix on his subject and price. The second letter explained the meaning of the first—it was from the Royal Academy; his picture there was sold to another collector.

and exultation took possession of them at the news that came unbearable impatience to see his new to James. Helen could not sit in the room shared by the two rooms revolving schemes of setting off in search of money and always ending with the conviction that it was lost. Several cards were left for him some of the morning, with the names of famous artists.

last came the letter so longed for; the directness was not illegible that it had been misinterpreted. It was evasive. It was evasive. It was ill-very ill; that his mind was wandering. Many of the words could not be read; but the date was there—the date where to find him—Brodick, in the Island of Arran.

her speech rose. There was not a moment to lose, or evening was drawing on, and there was to be thought and one wish in either heart. They succeeded in getting away; and before the dawn of that night, they had left London fifty miles behind.

they were in Glasgow early in the morning, and the Clyde early next day.

in the evening, they were nearing the banks of Arran. It was a lovely night when dropped into the beautiful bay of Brodick. The woods of the lordly castle lay in deep gloom to the water's edge. Helen and Mary stood on the shore side ready to land.

"This is the tenth of May—it is the day of our marriage. It is a good omen." They were near the little wooden pier. They were waiting for the boat to come, and were strained eyes to try to catch a glimpse of the one in all the world they longed to see; but among the few people that had collected in that place to see the steamer land its passengers, they could not be seen.

They looked round for guidance, for they had no guide, and applied to a man who seemed to be a porter-keeper, to know if he could direct them to the lodging where a young English gentleman was staying.

"He'll be frae Glasgow, this morning!" was his characteristic reply.

"No, oh, yes; and we are urgently anxious to get to bed, to lose no time," said Helen.

"Yes, ye can get frae Linnon?"

"Yes. You know where he is. Take us there, and at a trembling dread of asking a question, began to walk hurriedly up the road. Mary was so terribly that the kind-looking man made her take his arm, and followed, and soon overtook her.

"Is he ill?" she said soon, in a hushed, suppliant tone.

"No, ay, my pair lad! he is that. It's for the fever, they say. Ye'll maybe be tired to see him?"

"Helen said no more, and her tone indicated the guide walk faster and faster.

"He's had a guid doctor and a kind nurse," he said. "Mrs. Andrew Hamilton—we're a' Hamiltons here, ye see—she's been ay beside him."

[illegible][illegible]